

PLC



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/844,675	04/30/2001	Gordon W. Roberts	1770-254US JA/Id	8980

21918 7590 03/25/2004

DOWNS RACHLIN MARTIN PLLC  
199 MAIN STREET  
P O BOX 190  
BURLINGTON, VT 05402-0190

EXAMINER
----------

CHUNG, PHUNG M

ART UNIT	PAPER NUMBER
----------	--------------

2133

DATE MAILED: 03/25/2004

7

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No

09/844,675

Applicant(s)

ROBERTS ET AL.

Examiner

Phung My Chung

Art Unit

2133

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

Art Unit: 2133

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-,23 and 25-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Rosenthal et al (5,646,521).

As per claims 1, 22-23 and 25, Rosenthal et al disclose the invention substantially as claimed, comprising: a signal generator integrated on a chip for generating a test signal for exciting a circuit under test (CUT); and  
A signal digitizer integrated on the chip for extracting a digital signal for test and measurement from a response signal received from the CUT. (See col. 19, lines 1-12).

As per claims 2-6, the teaching of Rosenthal et al has been discussed above.  
Rosenthal et al further disclose: wherein the signal generator comprises a memory circuit (col. 20, lines13-15) and further comprises a filter (385). (See col. 6, lines 7-22).

As per claims 7, Rosenthal et al further disclose wherein the signal generator comprises means for programming the test signal. (Col. 9, line 28).

As per claims 8-18, Rosenthal et al further disclose: wherein the signal digitizer comprises: a reference voltage generator for generating a variable DC reference voltage signal;

A comparator for extracting the digital signal in response to the comparison of the response signal and the reference voltage. (Col. 1, lines 49-61 and col. 9, lines 29-30).

As per claims 19-21, Rosenthal et al further comprising a control means for synchronously controlling the signal digitizer and signal generator. (Col. 6, lines 7-11) and a programming means for programming the system wherein the signal digitizer is programmed and controlled to extract the digital signal in response to a plurality of samples of the response signal. (Col. 5, lines 57-65).

As per claims 26-38, these claims are also rejected under the same rationale as set forth in system claims 1-5, 7-12 and 14-15.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenthal et al (5,646,521).

The teaching of Rosenthal et al had been discussed above. They do not disclose a plurality of circuits under test and wherein the system comprises a plurality of signal generators and a plurality of signal digitizers and wherein the system further comprises a means for programming the signal generators and signal digitizers whereby the system is operable to selectively test and measure the circuit under test. However, Rosenthal et al disclose a circuit under test and wherein the system comprises a signal generator and a signal digitizer and wherein the system further comprises a means for programming the signal generator and signal digitizer whereby the system is operable to selectively test and measure the circuit under test (col. 19, lines 1-17). Rosenthal et al also disclose that many modifications in the apparatus and methods would be recognizable by those of skill in the art. Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to set a plurality of circuits under test instead of a single circuit under test and wherein the system comprises a plurality of signal generators and a plurality of signal digitizers and wherein the system further comprises a means for programming the signal generators and signal digitizers whereby the system is operable to selectively test and measure the circuit under test to speed up the test process.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phung My Chung whose telephone number is 703-305-9686. The examiner can normally be reached on Monday to Friday.

Art Unit: 2133

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on 703-305-9595. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



PHUNG M. CHUNG  
PRIMARY EXAMINER